

Installer: Ram Jack of Tennessee · Milan, TN · 731.686.0370



SITUATION

Genesis Engineering out of Franklin, TN was hired by the Tennessee Board of Regents to evaluate three Austin Peay Apartment buildings they were having settlement issues with. Genesis installed crack monitors and took readings for three years. They came to the conclusion that three of the buildings required underpinning in order to stabilize the settlement of the foundation. Austin Peay facility manager contacted Ram Jack of TN to pretrain a bid for the repairs.

SOLUTION

Genesis Engineering provide loads and areas of the three buildings that were in need of repair. Ram Jack of TN worked with Ram Jack’s corporate engineering team to come up with a plan of repair to support buildings. The repair consisted of 38 helical piles on building 100, 41 helical piles on building 200, and 53 helical piles on building 300, for a total of 132 piles. 2 7/8” and 3 1/2” helical piles with 5’ external sleeves were designed to carry the loads. A sister beam was also designed on sections of the 3 buildings consisting of a rebar cage with 6 runs of #6 reinforcement and doweled into the existing footing to help carry the load of the existing unreinforced footing of the buildings between the helical piers. The sister beam was a 2’x2’ formed footing beside the existing footing, and would be installed after the piles were in place, so the piles would be encased in the new beam. Ram Jack would have 60 days to complete job or liquid damages would come into place.

CONCLUSION

Ram Jack of TN installed the 132 helical piles at an average depth of 60’ deep below grade and the sister beam. The work was completed 15 days ahead of schedule. Austin Peay facility members and Genesis Engineering Group were very satisfied with the work performed and extremely happy on finishing the job 15 days ahead of the schedule due. The work didn’t cause any interference with students moving back into the apartments after a long summer break.